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ACHIEVEMENT MOTIVES OF HISPANIC AND MAINSTREAM NAVY RECRUITS.(U)

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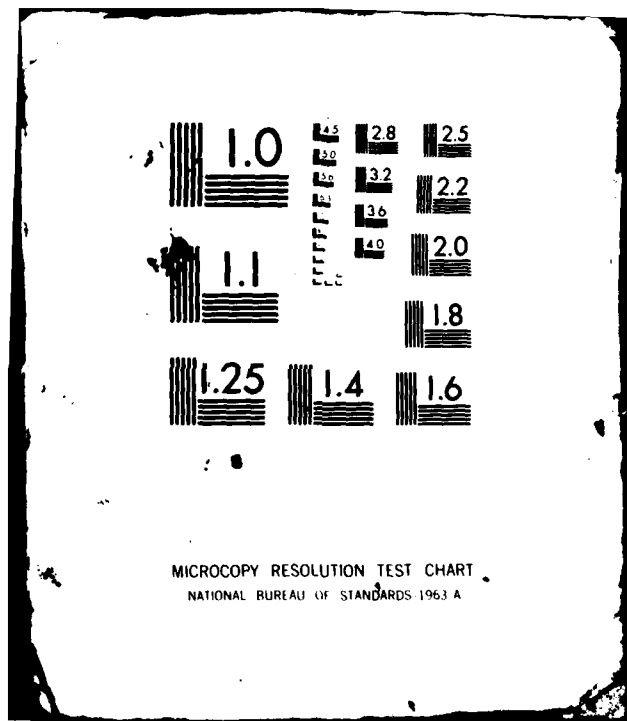


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the Hispanic subjects provided data that yielded only two factors that had some resemblance with the Helmreich and Spence factors. The major themes emphasized by the Mainstream subjects were Task Oriented Mastery, Work, Competition, and Avoidance of Interpersonal Competition. The major themes emphasized by the Hispanics were Competitive Skilled Craftmanship, Competitive Work, Positive Attitude toward Work, and Avoidance of Interpersonal Competition. A multivariate Analysis of Variance found seven of the 23 items discriminating between the Mainstream and Hispanic samples. However, examination of the meaning of these items, in view of the factor patterns, suggested that only the Work items have the same meaning for the Mainstream and the Hispanic subjects. The data suggest that the Mainstream sample agrees with the work items; the Hispanics agree slightly more than the Mainstream with these items, thus apparently are slightly higher in achievement motivation than the Mainstream subjects. It is hypothesized that the Navy's recruiting procedures either exclude those Hispanics of moderately positive attitudes toward work, or attract those of higher need achievement or do not attract Mainstream recruits of higher need achievement and thus the Hispanic recruits of the Navy have somewhat higher levels of achievement motivation than the Mainstream recruits.



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Achievement Motives of Hispanic and Mainstream Navy Recruits

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In a series of publications Helmreich and his associates have argued that it is possible to measure aspects of achievement motivation with twenty-three items of the Work and Family Orientation Questionnaire developed by Helmreich and Spence (1978). It has also been argued that this Questionnaire may be useful cross culturally (Helmreich, Note 1). The present paper tests this claim by administering the twenty-three items to samples of Hispanic and Mainstream members of the U.S. Navy.

The Helmreich and Spence questionnaire was inspired by the work on achievement motivation (Ach, 1910; Lewin, 1926; Murray, 1938; McClelland, Atkinson, Clark and Lowell, 1953) which has resulted in a large number of publications (see Helmreich & Spence, 1978, for a review). In their effort to measure both masculine and feminine personality variables relevant to this construct Helmreich and Spence arrived at the Work and Family Orientation Questionnaire. Factor analyses yielded four similar factors for males and females. The factors were named Work, Mastery, Competitiveness, and Personal Unconcern. The first three deal respectively with the desire to work hard, the need for intellectual challenges, and the desire to succeed in competitive, interpersonal situations. Personal Unconcern measures attitudes about the negative interpersonal consequences of achievement and is conceptually related to Fear of Success (Horner, 1968).

The instrument seems very promising, since it predicts specific achievement (Helmreich, Beane, Lucker, & Spence, 1978; Helmreich, Spence, Beane, Lucker, & Matthews, 1980), income (Helmreich et al., 1978), grades, performance in laboratory tasks, job satisfaction, and leisure satisfaction; it discriminates athletes and non-athletes, and predicts creative leisure (such as chess, the arts) (Helmreich, Note 2). A frequent finding has been that individuals high on Work and Mastery and low on Competition are successful.

Method

Sample. Eighty Hispanic and 80 Mainstream recruits responded to the questionnaire, while being classified into Navy jobs, as part of a larger study of the perceptions of the social environment by these recruits. In each of the three Navy recruit stations (Florida, California and Illinois) when a Spanish surname recruit was to be classified the classification officer checked the recruit's self-identification on an application form completed by all recruits, on which "Hispanic" was one of the ways in which the applicant could describe himself. If the Spanish-surname recruit had selected the "Hispanic" self-identification label, he was asked to complete a number of questionnaires, which included the 23 Helmreich and Spence items. At that time another recruit (with a non-Spanish surname) was randomly selected and given the same questionnaires. These other recruits are here referred to as "Mainstream," and will include both whites and blacks as well as Hispanics who did not self-identify with the "Hispanic" label.

Analyses. A principal axes factor analysis of the 23 items was carried out separately for the two ethnic groups. Communalities were estimated through a procedure in which the program determines the number of factors to be extracted from the original correlation matrix, and replaces the main diagonal elements of the correlation matrix with initial estimates of communalities computed as the squared multiple correlation between a given variable and the remaining variables in the matrix. Next it extracts the same number of factors from this reduced matrix and continues iterating until the communality estimates become stable. Four factors were extracted, and an oblique rotation was carried out, since that was the number of factors and methods of rotation used by Helmreich and Spence (1978).

Results

Table 1 shows the loadings of the four factors obtained from the Mainstream and the Hispanic data. For convenience we have shown the Helmreich and Spence factor loadings first, followed by the Mainstream and the Hispanic loadings, for each of the four factors.

Table 2 shows the Tucker coefficients of congruence between the Helmreich-Spence factors on the one hand and the Mainstream and Hispanic factors on the other. Only values greater than .55 are shown. These values are significant at $p < .05$, as per Cattell (1978, p. 253).

It is clear from inspection of the table that three of the four Mainstream factors correspond reasonably well to the Helmreich-Spence factors; however, only two of the four Hispanic factors show similarly good correspondence.

The first factor is emphasizing Mastery. The Helmreich-Spence loadings of four items correspond well with those of our Mainstream subjects. However, the Mainstream data also indicate that when a person is high in Mastery that person is likely to agree with the statements "I feel that good relations with my fellow workers are more important than performance on a task," "It is important to me to perform better than others on a task," "I feel that winning is important in both work and games," and "It annoys me when other people perform better than I do." Thus, the Mainstream data appear to reflect a Task Oriented Mastery. The mean agreement on the items of this factor is 2.7 (where 1=strongly agree, 2=slightly agree, 3=indifferent), suggesting considerable agreement.

The Hispanic sample's corresponding factor shows agreement, close to the neutral point (2.8) with the statement "I would rather do something at which I feel confident and relaxed than something which is challenging and difficult" and agreement with "I prefer to work in situations that require a high level of skill" (2.1), "Once I undertake a task I persist" (1.9), and a strong agreement with "I try harder when I am in competition with other people" (1.5). This suggests an orientation toward skilled persistence--requiring work and extra motivation when in competition. This factor, then, appears to reflect Competitive Skilled Craftmanship.

Factor 2 was called Work by Helmreich and Spence and that also seems to be a good factor name for our factor. On no less than five items the Mainstream and Hispanic samples converged with the Helmreich and Spence findings. The Hispanics have a somewhat more positive attitude toward Work (1.6) than the Mainstream (1.8)

subjects. They associated several items to the Work factor: "I enjoy working in situations involving competition with others," "If I am not good at something I would rather keep struggling to master it than move to something I may be good at," "I feel that winning is important in both work and games," and "I try harder when I am in competition with other people." Thus, it appears that the Hispanic factor is a Competitive Work factor rather than a simple Work factor as found in the Mainstream data.

The third factor in Helmreich and Spence was Competition. The data of the Mainstream sample converged reasonably well with it; however, the data of the Hispanic sample did not. The Mainstream factor included agreement with "I enjoy working in situations involving competition with others" (2.4), very slight disagreement (3.1) with "I feel that good relations with my fellow workers are more important than performance on a task," and agreement with "I avoid discussing my accomplishments because other people might get jealous" (2.8), and "I try harder when I am in competition with other people" (2.0). This is a Competition factor with mean levels of agreement of 2.5.

The Hispanic factor, however, was different and reflected a Positive Attitude toward Work, characterized mostly by loadings on "I like to work hard," and "I like to be busy all the time," and secondarily on "If I am not good at something I would rather keep struggling to master it than move on to something I may be good at." The mean agreement level for this factor was 2.3.

The fourth factor was called by Helmreich and Spence Personal Unconcern and it is conceptually linked to Fear of Success (Horner, 1968). A representative item is "I sometimes work at less than my best...others may resent me..." The three highest loading items of the Helmreich and Spence study correspond well with the items of both the Mainstream and the Hispanic samples. However, for the Mainstream sample there is also the tendency toward agreement with "I would rather do something at which I feel confident and relaxed than something which is challenging and difficult" (2.8), and "It is important for me to perform better than others on a

task" (2.1), and disagreement (3.3) with "It annoys me when other people perform better than I do." Thus Fear of Success is associated with a relaxed attitude toward mastery and avoidance of competition. Avoidance of Interpersonal Competition may be indeed a good label for all samples. It is important to note, however, that both the Mainstream and the Hispanic subjects show slight disagreement with the items of this factor, with 3.2 and 3.3 their respective means on this factor.

A Multivariate Analysis of Variance contrasting the Mainstream and Hispanic samples showed significant differences on seven items. The Hispanic sample agreed to a greater extent than the Mainstream sample on two Work items (No. 2 and 14), three Competition items (No. 3, 15, and 23) and one Mastery item (No. 10); the Hispanics disagreed less than the Mainstream on one Competition item (No. 21). One rival hypothesis concerning these differences in need for achievement is that the Hispanics may be more extreme in their acquiescence response levels. Examination of the total pattern of agreements and disagreements with the 23 items did not support this hypothesis. Furthermore, the same subjects responded to 10 positive and 10 negative F-Scale items (Adorno et al., 1950). By counting the number of times each subject agreed with a positive and a negative item one can obtain an additional estimate of acquiescence response tendencies. None were found that differentiated the Mainstream and Hispanic samples. Thus it appears that the Hispanics do differ from the Mainstream on their levels of need for achievement, as measured by the seven items mentioned above.

Discussion

The study had three goals: (1) To explore the adequacy of the Helmsreich and Spence measures of achievement motivation with a culturally different sample, (2) to describe the factor structure of this instrument obtained from Mainstream and Hispanic samples, and (3) to compare the Mainstream and Hispanic samples.

With respect to the first goal, the results were mixed. Factors 1, 2 and 4 of the Helmsreich and Spence study are clearly recognizable in these data. However,

while our Mainstream sample, in agreement with Helmreich and Spence's samples, have a Work factor, our Hispanics had a Competitive Work factor, suggesting that this sample does not distinguish Work from Competition. These results may also be a reflection of the value Hispanics have been found to place on achievement whenever it brings positive regard from others (Szalay, et al., 1978), as competitive work some time does. The Personal Unconcern factor of Helmreich and Spence was also clearly identifiable, although Avoidance of Interpersonal Competition seems to better capture the meaning of the items that co-vary in both that study and this one.

Thus with respect to our third goal, the only difference that we can notice between the Mainstream and Hispanics is on Factor 2. Six of the seven items that were significantly different in the MANOVA were highly loaded on this factor for one or the other of the samples. Hence we can conclude that while the Mainstream sample agrees with these six work items, the Hispanics agree even more with the same items. The two items on which both the Mainstream and the Hispanics have high loadings and are significantly different were: "It is important for me to do my work as well as I can even if it isn't popular with my co-workers" (Mainstream mean=1.9; Hispanic mean=1.6) and "There is satisfaction in a job well done" (Mainstream mean=1.5; Hispanic mean=1.2).

The levels of acculturation and biculturalism of the individuals in the Mainstream and Hispanic samples (see Triandis, Hui, Lisansky and Marin, 1981) were correlated with the factor scores of the present factors. None of the correlations reached significance with one exception: the Mainstream subjects with a Family History which showed little or no travel abroad, no family members who are citizens of other countries, and parents and grandparents born in the U.S., showed the highest levels of Task Oriented Mastery.

It appears, then, that the way the Navy is recruiting individuals from the Mainstream and Hispanic subcultures favors the quality of the Hispanic recruits. Three interpretations of this finding are viable:

(1) Perhaps the Navy is missing some Hispanics who have lower levels of achievement motivation than the Hispanics it is recruiting, who nevertheless would be equivalent in achievement motivation to the Mainstream individuals it is recruiting. If this hypothesis is supported by other data it has important implications for Navy recruiting.

(2) Hispanics with high needs for achievement may perceive the Navy as a place to obtain the training that may help them to better their socio-economic status.

(3) Perhaps the Navy is missing some Mainstream individuals who have high levels of achievement motivation and do not consider the Navy as a way of fulfilling their aspirations. The present data do not permit a choice among those interpretations, but other data of the large project may do so.

The overall similarities between Mainstream and Hispanic subjects on their achievement needs lend support to previous studies (e.g., Barberio, 1967; Mech, 1972; Mingione, 1968; Ramirez & Price-Williams, 1976; Versteeg & Hall, 1971) where no differences in need for achievement have been found between Anglos and Hispanics. Although some early impressionistic and experimental writings (e.g., Logan, 1966) proposed that Hispanics had lower levels of need achievement, more recent authors have shown that this is not the case and that the earlier findings showing a difference may have been the product of faulty methodologies.

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Table 1: Four Factor Solution from Helmreich & Spence, and from Mainstream and Hispanic data, showing only loadings larger than .30.

	Helmreich-Mastery	Mainstream-Task Oriented Mastery	Hispanic-Skilled Craftsmanship	Helmreich-Work	Mainstream-Work	Hispanic-Competitive work	Helmreich-Competitiveness	Mainstream-Competition	Hispanic-Positive Attitude Toward Work	Helmreich-Personal Unconcern	Mainstream-Avoidance of Interpersonal Competition	Hispanic-Avoidance of Interpersonal Competition
1. I would rather do something at which I feel confident and relaxed than something which is challenging and difficult.	.58		.51								.59	
2. It is important for me to do my work as well as I can even if it isn't popular with my co-workers.				.40	.69	.37						
3. I enjoy working in situations involving competition with others.						.43	.56	.53				
4. When a group I belong to plans an activity, I would rather direct it myself than just help out and have someone else organize it.		-.63										
5. I feel that good relations with my fellow workers are more important than performance on a task.		-.47						-.57				
6. I would rather learn easy fun games than difficult thought games.											.46	.46
7. It is important to me to perform better than others on a task.		-.49					.65					
8. I worry because my success may cause others to dislike me.										.53	.50	.46

Table 1 (Cont'd)

	Helmsreich- Mastery	Mainstream-Task Oriented Mastery	Hispanic- Skilled Craftmanship	Helmsreich- Work	Mainstream- Work	Hispanic-Competitive work	Helmsreich-Competitiveness	Mainstream-Competition	Hispanic- Positive Attitude Toward Work	Helmsreich- Personal Unconcern	Mainstream-Avoidance of Interpersonal Competition	Hispanic-Avoidance of Interpersonal Competition
9. I find satisfaction in working as well as I can.				.54	.81	.57						
10. If I am not good at something I would rather keep struggling to master it than move on to something I may be good at.	-.37	-.61				.31			.37			
11. I avoid discussing my accomplishments because other people might be jealous.								.42		.42	.51	.42
12. Once I undertake a task, I persist.	-.35		-.33		.35	.41		.42				
13. I prefer to work in situations that require a high level of skill.	-.36	-.33	-.58									
14. There is satisfaction in a job well done.				.48	.88	.68						
15. I feel that winning is important in both work and games.		-.45				.48	.73					
16. I more often attempt tasks that I am not sure I can do than tasks that I believe I can do.	-.46	-.68										
17. I sometimes work at less than my best because I feel that others may resent me for performing well.										.56	.54	.55

Table 1 (Cont'd)

	Helmsreich- Mastery	Mainstream- Task Oriented Mastery	Hispanic- Skilled Craftsmanship	Helmsreich- Work	Mainstream- Work	Hispanic-Competitive work	Helmsreich-Competitiveness	Mainstream- Competition	Hispanic- Positive Attitude Toward Work	Helmsreich- Personal Unconcern	Mainstream- Avoidance of Interpersonal Competition	Hispanic- Avoidance of Interpersonal Competition
18. I find satisfaction in exceeding my previous performance even if I don't outperform others.				.43	.78	.56						
19. I like to work hard.				.46	.39				.73			
20. Part of my enjoyment in doing things is improving my past performance.				.51	.60	.71						
21. It annoys me when other people perform better than I do.		-.30					.50				.32	.60
22. I like to be busy all the time	-.33	-.32							.70			
23. I try harder when I'm in competition with other people.			+.38			.50	.64	.50				

Table 2: Tucker Coefficients of Congruence between Helmreich and Spence and Mainstream and Hispanic

Factors (Showing only coefficients greater than .55, which are $p < .05$)

Helmreich and Spence

<u>Factors</u>	<u>Mainstream Factors</u>		
	Task Oriented Mastery	Avoidance of Inter- personal Competition	Work Competition
Mastery	.65		
Work			.94
Competitiveness			(.51)
Personal Unconcern		.78	
	<u>Hispanic Factors</u>		
	Competitive Work	Avoidance of Interpersonal Competition	Skilled Craftmanship Positive Attitudes toward Work
Mastery			.58
Work	.83		.60
Competitiveness			
Personal Unconcern		.68	

Notes

- ① We thank Robert Helmreich for critical comments on an earlier draft of this paper.

Note 1- Helmreich, R. L. Personal communication, 1979.

Note 2- Helmreich, R. L. Personal communication, 1980.